

## LOCAL GOVERNMENT GREENHOUSE GAS REDUCTION GRANT PROGRAM

### **ELIGIBLE PROJECT TABLE**

June 18, 2009; revised July 28, 2009

#### **Purpose of Eligible Project Table**

*This table identifies categories of projects eligible under the Local Government Greenhouse Gas Reduction Grant Program, as well as specific examples of each project category. These are projects have been selected for their greenhouse gas-reducing potential based on the experience of communities across the United States and elsewhere, and/or their likelihood to reduce energy consumption. Applicants are free to propose other projects not presently listed within these categories if they believe they can meaningfully reduce greenhouse gas emissions. All projects will be evaluated against the criteria in the grant program guidance ([http://www.nj.gov/dep/opsc/docs/GHG\\_Grant\\_Guidance.pdf](http://www.nj.gov/dep/opsc/docs/GHG_Grant_Guidance.pdf)).*

(SJ) Indicates that this action is included on the **Sustainable Jersey Program** actions list (see: [www.sustainablejersey.com](http://www.sustainablejersey.com) ).

### **GREENHOUSE GAS ACTION PLANNING AND IMPLEMENTATION**

Expected Project Cost = \$10,000 - \$50,000

*The following projects are those that provide communities with the emissions baseline and strategic direction upon which to base emission reduction actions selection and implementation, and measure resulting progress. They are very useful in ensuring that subsequent funding is directed to justified projects.*

**REQUIREMENT: All proposals in this category must be accompanied by a Governing Body Resolution stating that the applicant, if awarded funding, commits to implementing at least 50% of the measurable actions identified by the planning activity.**

### ***Conduct Community-wide Energy Audit***

All sectors of a community – local government, residential, commercial, institutions, etc. – consume energy for multiple purposes, e.g., heating and cooling, appliances, business operations, transportation. An energy audit is a systematic evaluation of how energy is used and can provide recommendations on how to more efficiently use and conserve it and thus save money. A Community-wide Energy Audit strives to examine how energy is used across sectors – local government, residential and commercial – for the purpose of establishing an understanding of where energy is wasted in order to inform energy saving actions.

- Quantify how energy is used across municipality within various sectors (local govt., residential, transportation, etc.) to inform reduction actions.

### ***Calculate Carbon Footprint from Local Government Operations (aka GHG Inventory) (SJ)***

A Municipal Carbon Footprint (also known as a GHG Inventory) measures the amount of greenhouse gas (GHG) emissions produced by local government operations in a given year. Creating a footprint is the first step to reducing municipal GHG emissions. The footprint will detail the sources of emissions so that actions can be focused on the largest emitters. The footprint will also enable a municipality to track its progress and determine if new policies are having an impact.

### ***Calculate Community-wide Carbon Footprint (aka Community GHG Inventory) (SJ)***

A Community Carbon Footprint is a measurement of the amount of greenhouse gas emissions produced by municipality's residents, schools, businesses, and industries in a given year. It shows a community's impact on global warming and climate change. The footprint can be reported publicly to build awareness and support for actions that can bring down carbon emissions. It also can be used to track the progress of a municipality as they implement actions to combat global warming and climate change.

- For municipalities in Mercer, Burlington, Camden and Gloucester Counties, access the **DVRPC Municipal GHG Emissions Inventory (March 2009)**.

### ***Develop and Implement Community Climate Action Plan (aka Community GHG Reduction Plan) (SJ)***

A Climate Action Plan (CAP) is a set of strategies and actions designed to lower the greenhouse gas emissions of a municipality.

- Develop a Green Building and Environmentally Sustainability Element, as authorized by the recent amendment to the Municipal Land Use Law (see PL2008, c.54 (A1559 1R)), that incorporates a greenhouse gas reduction plan.

## LAND USE PLANNING AND TRANSPORTATION

Expected Project Cost = \$25,000 - \$200,000

Transportation accounts for 34% of NJ's GHG emissions. Land use planning and transportation planning can reduce energy use and greenhouse gas emissions by 1) reducing Vehicle Miles Traveled (VMT), by giving residents and employees access to other convenient, low-carbon modes of transportation such as walking, biking and using transit and by reducing the average length of trips; and 2) by encouraging higher density construction, which uses less energy for heating and cooling.

### ***Amend Master Plan to Establish, Prioritize and Enact Municipal Greenhouse Gas Reduction Policies and Actions***

- Establish greenhouse gas reduction as Master Plan goal and implement actions via Master Plan elements (e.g., Housing, Circulation, Conservation)
- Development of a Master Plan sub-element (e.g., Conservation Element) that demonstrates a municipality's commitment to ensuring the measurable reduction of the emission of greenhouse gases or a measurable reduction in energy demand. Possible actions include incorporation of Community Carbon Footprint, and codification of Climate Action Plan.
- Create Green Building and Environmental Sustainability Element per recent amendment to MLUL authorizing inclusion of a Green Building and Environmentally Sustainable Element (see PL2008, c.54 (A1559 1R)); incorporate greenhouse gas reduction policies, targets and actions.

### ***Develop and Implement Climate-friendly Subdivision and Site Plan Review Standards***

- These standards should encourage the reduction of energy demand and greenhouse gas emissions through energy-efficient land use patterns, VMT reduction and green design.

### ***Develop and Implement Climate-friendly Design Guidelines and Zoning Standards***

- These guidelines and standards should encourage the reduction of energy demand and greenhouse gas emissions through energy-efficient land use patterns, VMT reduction and sustainable development.

- Preparation of zoning ordinances allowing for compact, walkable mixed-use development and/or transit oriented development in appropriate locations that target a reduction in the number of vehicle miles traveled.
- Preparation of illustrated design guidelines and/or form-based codes that will ensure compact mixed-use development/transit-oriented development areas and enhance community character and promote pedestrian activity.
- Preparation of zoning standards for center-based land development activities within Designated Centers or municipalities conferred with Plan Endorsement by the State Planning Commission.

### ***Develop and Implement Integrated Land Use and Circulation Plans Aimed at Reducing VMT***

- Create a sub-regional sustainable Transportation Multi-modal Plan that demonstrates a reduction in Vehicle Miles Traveled (locally and regionally) through the elimination of trips, a reduction in the length of trips, and changes in mode of travel.
- Create a municipal circulation element that demonstrates a reduction in Vehicle Miles travelled (locally and regionally) through the elimination of trips, a reduction in the length of trips, and changes in mode of travel.
- Create a regional alternative transportation route option plan for the movement of goods and people that also includes identifying alternate transportation routes and modes for emergency situations. Such plans can mitigate against the potential for congestion and extended periods of idling.
- Develop land use and transportation plans to support existing or proposed Transit Village designation.

### ***Implement a Transfer of Development Rights (TDR) Program to Achieve Compact Growth that will Reduce VMT***

- Design and implementation of a Transfer of Development Rights (TDR) program that creates center-based development that considers and integrates wastewater, water supply and multi-modal transportation needs as well as utilities, jobs, retail options, trail systems and other services.

### ***Promote Non-Vehicular Mobility***

- Development of Complete Streets Policy and/or Program (**SJ**) -- Primary consideration should be given to establishing performance standards with measurable outcomes, and enabling safe access for all roadway users through appropriate policies and practices that encourage redesign, safety and appropriateness to local context and needs.

- Create a greenway trail plan that create recreational opportunities and provide transportation options, connecting both the built and natural environment.
- Prepare a bike and pedestrian master plan that expands opportunities for reducing automobile dependency and sets design parameters for new development/re-development.

***Access to the Region's Core (ARC) Program*** (new Hudson River rail tunnels connecting NJ and NY)

- Assess infrastructure needs to accommodate transit-oriented development near rail stations resulting from increased capacity provided by ARC tunnels.
- Develop local/regional integrated land use-circulation plan that takes advantage of increased rail capacity resulting from ARC tunnels.

***Regional and County Planning***

- Applying regional perspective, integrate local/county updated wastewater management, water supply, land use, and transportation plans to achieve compact, mixed-use development that can provide mobility alternatives and reduce automobile dependency.
- Participate in NJFIT corridor planning projects as partner in multi-community effort.

## TRANSPORTATION SYSTEM EFFICIENCY

Expected Project Cost = \$10,000 - \$100,000

***Develop and Implement "Green Fleet" Policy (SJ)***

The equipment and vehicles that make up a local government fleet contributes greenhouse gases as well as other pollutants to the environment. These pollutants degrade air, water quality, and public health. A "green fleet" minimizes these negative impacts as well as operating costs by improving energy efficiency and reducing emissions through the use of alternative vehicles and fuels. Green fleets are developed by purchasing more fuel-efficient vehicles (cars, buses, and service vehicles), retrofitting existing vehicles with emissions control devices, converting to cleaner fuels, and evaluating local practices to devise new ways to do business that reduce overall motor vehicle use.

- Convert vehicles to alternative, lower-carbon fuel (biodiesel/blends; compressed natural gas [CNG])
- Provide funding to cover the cost premium associated with alternative, lower carbon fuel vehicles (hybrid; plug-in hybrid; electric; biodiesel; CNG)
- Provide funding to cover the cost premium associated with alternative, lower carbon fuels (biodiesel; CNG)

### ***Conduct Anti-Idling Education & Enforcement Program (SJ)***

A car is idling when the engine is turned on but the vehicle is not in motion. This is not only unnecessary, but also harmful to the environment and our health. New Jersey has had a No-Idling regulation for diesel-fueled commercial vehicles since 1972. The current regulation, effective since 1985, and updated in 2007, states that, with limited exceptions, no motor vehicle (diesel or gasoline fueled) may have its engine running if stopped for more than three consecutive minutes. A community-based campaign to reduce idling can be effective.

## **GREEN INFRASTRUCTURE, SEQUESTRATION and RESOURCE CONSERVATION**

Expected Project Cost = \$10,000 - \$50,000

### ***Building Commissioning or Retro-commissioning***

Commissioning is the process of ensuring that new building systems are designed, installed, functionally tested and capable of being operated and maintained to conform to the design intent. Commissioning for existing buildings (sometimes referred to as retro-commissioning) is a systematic process for investigating, analyzing, and optimizing the performance of building systems by improving their operation and maintenance to ensure their continued performance over time, i.e., building systems tune-ups. This process helps make the building systems perform interactively to meet the owner's current facility requirements. According to Lawrence Berkeley National Laboratory commissioning can save as much as 40% of the buildings utility bills for HVAC. (US Green Building Council)

- Conduct building commissioning and/or retro-commissioning evaluations.

### ***Waste Management***

- Conduct study to evaluate feasibility and economics of landfill gas flaring projects. Proposed landfills that pass an initial DEP screening

test would be eligible for funding to offset the cost of landfill gas control equipment including, but not limited to, solar powered flares for landfill gas destruction.

- Conduct pilot projects related to converting organic waste (e.g., from farms, grocery stores, food industry, etc.) to liquid fuels or other usable end product. A municipality's size, road and rail access and proximity to farms/food industry and research centers would help to determine what kind of organic waste to energy projects would be possible to help reduce energy consumption and waste generation. An example of an existing project is "Biotown" in Reynolds, Indiana (<http://www.in.gov/biotownusa/>).

### ***Clean Energy***

- Support for the planning of solar photovoltaic (PV) electric generating projects on publicly-owned closed or non-operating landfills.
- Street and security lighting not otherwise covered by NJ Clean Energy Program or appropriate utility.
- Support for renewable energy and energy efficiency projects not presently eligible for NJ Clean Energy Program funding.

### ***Identify Opportunities and Implement Green Design and Infrastructure***

- Design and/or install "green" (rooftop plantings) and/or "cool" (reflective coating) roof **(SJ)**
- Natural Landscaping – Develop and implement policies and programs that improve energy efficiency through landscaping best practices.

### ***Tree, Woodlands and Natural Space Management (SJ)***

- Initiate or expand tree management programs by: planning and assessing the existing community tree resources; assessing the health of the trees; developing programs to protect, manage, and expand the tree canopy in the municipality (e.g., promote adoption of local ordinances with tree canopy requirements for new development; deer fencing, etc.) and document the benefits trees provide for mitigating climate change.
- Support towns and local municipalities with efforts to implement a Green City or vacant land stabilization program
- Support local governments in developing an inventory of conservation easements, deed restrictions and other limitations imposed on land, which limit the use or development on properties while preserving in perpetuity the ecological or open space value of such properties.

### ***Water Conservation (SJ)***

- Develop and implement programs that reduce use of potable water (public or private) and the energy associated with pumping that water

## **STRENGTHENING LOCAL ECONOMIES**

Expected Project Cost = \$5,000 - \$50,000

### ***Promote Local Food Production and Gardens (SJ)***

Industrial or mass-produced food relies heavily on fossil fuel inputs to plant, harvest, process, package, and transport food as well as to manufacture and apply fertilizer, pesticides, and herbicides. Locally-grown foods reduce the carbon footprint by reducing energy consumption associated with its transport. If the locally-produced food is also grown sustainably without inputs such as synthetic fertilizers and pesticides, greater energy savings and thus lower GHG emissions can result.

- Establish a Farmers Market
- Plan for Local Food Production & Gardens – e.g., design and feasibility studies to evaluate food production in greenhouses that use waste heat or renewable energy and/or are constructed on previously disturbed sites (i.e., urban greenhouses powered or heated by waste heat/renewable energy technologies).
- Local Food Production and Gardens

### ***Promote Buy Local Program (SJ)***

Communities working in partnership with business leaders can develop “Buy Local” campaigns that focus on supporting and strengthening local businesses. Buy Local campaigns work to re-circulate the purchasing dollars within the community by building consumer loyalty. This supports local merchants and builds community. It also saves the environment and prevents global warming by reducing travel distances for shoppers and products thus reducing gasoline consumed. Local shopping also offers the possibility of walking to stores, which has the added benefit of creating healthy active lifestyles.



Municipal governments can also directly support their local economy through promotion, collaboration, and advocacy activities and initiatives.

## OUTREACH AND EDUCATION CAMPAIGNS

Expected Project Cost = \$5,000 - \$50,000

### ***Implement Green Challenges & Community Programs (SJ)***

A Green Challenge program engages the community by challenging individuals, families, and businesses to change their behavior in support of the community's goals for sustainability. The Green Challenge program asks people to pledge to take the challenge, and to make a specific "green change" in their lives or in the way they do business. The program instructs and educates individuals on how to participate, and provides incentives for success. These can be very effective in improving individual use of energy.

- Community sponsored events and activities – for examples film festivals, lecture series, green fairs(SJ), workshops, trainings, tours
- Media/outreach campaigns, including direct mailings to residents, a newsletter series or website

### ***School-based Projects with or without Connected Learning Components***

Three project options:

- 1) Request funds for a school or community-based project that reduces GHG emissions (and are consistent with this project eligibility list), and/or
- 2) Include students (class or group) to help implement this project (not grant-eligible); and/or
- 3) Request funds to develop school learning components that to tie the project (#1) into school curriculum or school programs (grant-eligible).

**For additional requirements, go to [www.nj.gov/dep/opsc/docs/Project\\_Specific\\_Guidance/pdf](http://www.nj.gov/dep/opsc/docs/Project_Specific_Guidance/pdf).**

<b>OTHER</b>
Expected Project Cost = Project Dependent; Micro-Grants = \$25,000
<b>Highly-Warming Gases</b> <ul style="list-style-type: none"> <li>County and/or municipal level refrigerant/coolant (CFCs, HFCs) collection and disposal program.</li> </ul>
<b>Micro-grants</b> <ul style="list-style-type: none"> <li>A local government can request funding that will be re-distributed within the community to recognized community groups for measurable GHG reducing projects. Micro-grants can go to schools, churches, neighborhood and community groups, and non-profits that have ideas on how to reduce GHG emissions in the community. They can range up to \$25,000 (and no more than \$5,000 per micro-grant).</li> </ul>
<b>Innovations</b> <ul style="list-style-type: none"> <li>Project ideas that don't easily fall into one of the above categories but can demonstrate measurable GHG reductions and significantly meet other evaluation criteria.</li> </ul>